

## **AUTHORIZED CHEMICAL ADMIXTURES FOR USE IN CONCRETE**

The list of Authorized Admixtures for Use in Concrete is published and updated periodically for reference primarily by Caltrans field personnel and others involved in Caltrans projects.

As per State of California, Department of Transportation, Standard Specifications (May 2006), Section 90-4.03, or Standard Specifications (2010), Section 90-1.01D(1), no admixture brand shall be used in the work unless it is on Caltrans' current list of authorized brands for the type of admixture involved.

Admixture brands will be considered for addition to the authorized list if the manufacturer of the admixture submits to the Transportation Laboratory, 5900 Folsom Blvd., Sacramento, CA 95819-4612, a sample of the admixture accompanied by certified test results, which verify that the admixture complies with the requirements in the appropriate ASTM Designation. The sample shall be sufficient to permit performance of all required tests.

Authorization of admixture brands will be dependent upon a determination as to compliance with the specifications, based on the certified test results submitted, together with any tests the Department may elect to perform.

Inquiries regarding this list should be directed to Dr. Vijay Jain at (916) 227-7232 or email [vijay.jain@dot.ca.gov](mailto:vijay.jain@dot.ca.gov).

The Authorized List includes only those admixtures that comply with the following ASTM designations:

C494 - Standard Specification for Chemical Admixtures for Concrete.	pp. 3 - 11
C260 - Standard Specification for Air-Entraining Admixtures for Concrete.	pp. 12 - 13

The list provides certain essential data for field reference as well as general information that may assist in assessing properties of the plastic concrete.

The information contained herein, shall not to be used for advertising purposes, nor is it an endorsement by Caltrans.

*Continued on next page*

## NOTES:

Chemical admixtures containing chlorides as Cl in excess of one percent by weight of admixture shall not be used in concrete.

\*\* When the Contractor is permitted to reduce cement content by adding chemical admixtures, the dosage of admixture shall be the dosage used in ASTM Designation C494 for qualifying the admixtures.

\*\*\* This admixture provisionally qualified until the one-year strength test results are obtained.

\*\*\*\* Dosage calculated on the quantity of cementitious material and its alkali content.

AE = Air Entrained

NAE = Non-Air Entrained

## ADMIXTURE TYPES PER ASTM C494

- Type A - Water-reducing admixtures
- Type B - Retarding admixtures
- Type C - Accelerating admixtures
- Type D - Water-reducing and retarding admixtures
- Type E - Water-reducing and accelerating admixtures
- Type F - Water-reducing, high range admixtures
- Type G - Water-reducing, high range and retarding admixtures
- Type S - Specific Performance Admixtures

## Authorized ASTM C494 Chemical Admixtures for Concrete

Product name	ASTM C494 type	Class or composition	Dosage rates used to qualify for appropriate ASTM tests**, fl. oz. Per 100 lbs. of cement (report date)	At the qualifying ASTM dosage(s), what changes are expected relative to the reference concrete? *AEA=Air Entraining Admixture			Dosage rate suggested by manufacturer
				Water reduction %	Change in AEA* dose needed to maintain air content	Initial set retardation, (acceleration) hours	

**Active Minerals International**  
**34 Loveton Circle, Suite 100**  
**Sparks, MD 21152**  
**Tel. No.: (410) 825-2920**

Acti-Gel 208	S	Mg-alumino-silicate	3.5 (2013)	AE 0.0	More	AE (0.5)	2.0 to 5.0
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**BASF Admixtures, Inc.**  
**23700 Chagrin Boulevard**  
**Cleveland, OH 44122**  
**Tel. No: (216) 839-7500**

MasterGlenium 3030	A, F	Polycarboxylate Technology	6 (2001)	AE 36.6	Less	AE (0.1)	6.0 to 18.0
MasterGlenium 3400	A, F	Polycarboxylate Technology	4.8 (2004)	AE 16.4	Less	AE 1.1	2.0 to 12.0
MasterGlenium 7101	A, F	Polycarboxylate Technology	4.5 (2006)	AE 15.5	More	AE 0.9	3.0 to 12.0
MasterGlenium 7500	A, F	Polycarboxylate Technology	2.6 (2007)	AE 11.8	Less	AE (0.9)	2.0 to 15.0
MasterGlenium 7700	A, F	Polycarboxylate Technology	5.4 (2007)	AE 12.8	More	AE (0.0)	4.0 to 15.0
MasterGlenium 7920	A, F	Polycarboxylate Technology	3.5 (2014)	AE 12.9	Less	AE 0.2	2.0 to 12.0
MasterLife ASR 30	S	Lithium Nitrate (ASR)	15.5 (2011)	AE 4.9	Less	AE (1.0)	14 to 42
MasterLife CI 30	C	Calcium Nitrite Based	1 (2001)	AE 4.8	More	AE (1.5)	18.5 to 110
MasterLIFE SRA 20	S	Polyoxyalkylene Alkyl Ether	12.9 (2010)	AE 4.9	Less	AE 0.3	8.0 to 40.0
MasterMatrix 33	S	----	6 (2008)	AE 1.0	Less	AE (0.3)	2.0 to 12.0
MasterMatrix UW 450	S	----	1 (2008)	AE 2.3	Less	AE 0.0	0.5 to 4.0
MasterMatrix VMA 358	S	----	1 (2008)	AE 0.7	Less	AE (0.4)	2.0 to 10.0
MasterMatrix VMA 362	S	----	1 (2008)	AE 0.7	Less	AE (0.2)	2.0 to 14.0

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MasterPolyheed 100	A, C, E	Cement Dispersing Agent	9.0 and 15.0 (1998)	AE 6.7	More	AE (0.7)	8.0 to 30.0
MasterPolyheed 1025	A, F	Glenium Technology	4 (2003)	AE 9.0	Less	AE 0.7	3.0 to 12.0
MasterPolyheed 1725	A, F	Polycarboxylate	2.8 (2008)	AE 8.0	Less	AE (0.4)	3.0 to 12.0
MasterPolyheed 900	A	Sodium Nitrate	6.7 (2007)	AE 7.8	Less	AE 0.5	3.0 to 15.0
MasterPolyheed 997	A, F	Lignosulfonate Triethanolamine	5 (1990)	AE 6.9	Less	AE 0.4	3.0 to 12.0
MasterPozzolith 200	A, B, D	Cement Dispersing Agent	4 (1998)	AE 6.9	Less	AE 0.7	3.0 to 5.0
MasterPozzolith 322	A, B, D	Polymer, Triethanolamine	5.4 (2010)	AE 8.0	Less	AE 0.7	3.0 to 7.0
MasterPozzolith 700	A, B, D	Carbohydrates	2.5, 5.2 (2012)	AE 6.9	Less	AE 2.0	3.0 to 7.0
MasterPozzolith 80	A, B, D	Cement Dispersing Agent	3 (1998)	AE 6.8	Same	AE 0.2	4.0 to 10.0
MasterRheobuild 1000	A, F	Naphthalene Sulfonate	15 (1988)	AE 18	Less	AE 0.4	5.0 to 25.0
MasterSet AC 534	C	Cement Dispersing Agent	27 (1993)	AE 5.7	More	AE (1.7)	10.0 to 45.0
MasterSet DELVO	B, D	Salts of Organic Agent		AE 7.8	Less	AE 1.1	2.0 to 130
MasterSet FP 20	C, E	Polymer	15 (1990)	AE 5.5	More	AE 1.1	5.0 to 90.0
MasterSet R 300	B, D	Polymer	5 (1990)	AE 10	Less	AE 2.6	3.0 to 5.0
MasterSure 1390	S	Tributyl Phosphate, Acetic acid	0.5 (2012)	AE 5.4	More	AE 0.3	0.2 to 3.0
MasterSure Z-60	S	----	6 (2009)	AE 0.4	No Change	AE 0.9	3.0 to 12.0
PS 1466	A, F	Polycarboxylate	2 (2005)	AE 11.6	Less	AE 0.6	2.0 to 10.0
PS 1646	A, F	Polycarboxylate	4 (2014)	AE 12.8	More	AE 0.3	2.0 to 12.0

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				Water reduction %	Change in AEA* dose needed to maintain air content	Initial set retardation, (acceleration) hours	

**The Euclid Chemical Company**  
**19218 Redwood Road**  
**Cleveland, OH 44110-2799**  
**Tel. No: (216) 531-9222**

Accelguard AC N 200	C	Calcium Nitrate	60 (2012)	9.6	More	2.3	10.0 to 60.0
Accelguard NCA	C, E	Calcium Nitrate	13.3 (2012)	8.0	More	(1.3)	12.0 to 75.0
Eucon + SRA	S	Dipropylene Glycol n-butyl Ether	16.9 (2010)	AE 2.4	More	AE 0.1	12.0 to 20.0
Eucon 1037	F	Napthalene-Sulfonic acid	16 (2014)	11.7	Same	0.1	8.0 to 25.0
Eucon 37	A, F	Napthalene Sulfonate	16 (1999)	AE 18.31	Same	AE 0.7	6.0 to 18.0
Eucon 537	G	Lignosulfonates	13.3 (2012)	14.3	Less	2.6	6.0 to 32.0
Eucon ABS	S	Polycarboxylate Based	1.7 (2014)	4.7	More	0.0	1.0 to 15.0
Eucon ACN 200	C, E	Calcium Nitrate	50 (1999)	AE 6.5	More	AE (3.4)	10.0 to 60.0
Eucon AWA	S	Napthalene Sulfonate	2 (2014)	5.5	More	0.1	10.0 to 32.0
Eucon CIA	C	Calcium Nitrite	62.1 (2014)	5.7	More	(1.7)	10.0 to 90.0
Eucon DS	D	Sodium Hexameta Phosphate	5.0 (2012)	7.7	More	1.4	1.0 to 16.0
Eucon HC	B, D	Sodium Gluconate	3.5 (2012)	5.9	Less	2.6	2.0 to 8.0
Eucon Integral ARC	S	Lithium Nitrate	25 (2014)	6.9	More	(0.7)	**** (see notes)
Eucon LR	A, D	Lignosulfonate	6.5 (2012)	8.2	Less	1.3	3.0 to 10.0
Eucon MRX	A, F	Lignosulfonate	6.5 (2014)	11.7	More	0.2	3.0 to 12.0
Eucon NW	A	Lignosulfonate	3.5 (2014)	5.0	Same	1.2	2.0 to 6.0

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Eucon Retarder 100	B,D	Sodium Gluconate	3.2 (2012)	7.6	Less	3.2	2.0 to 6.0
Eucon SPC	A, F	Polycarboxylated Polymer & other additives	5 (2001)	AE 13.2	Same	AE (0.1)	3.0 to 12.0
Eucon SRA Floor***	S	Ethanol & Glycol Ether Solvent	16 (2012)	NAE 6.2	—	NAE 0.1	4.0 to 40
Eucon SRA-XT***	S	Polyethylene Glycol	8 (2012)	AE 6.9	Less	AE 0.0	4.0 to 40
Eucon W.O.	B, D	Phosphoric acid and Sodium Hydroxide	4.9 (2013)	10.4	Same	2.6	1.0 to 16.0
Eucon WR-75	A, B, D	Sodium Gluconate	4.3 (2011)	9.1	Less	2.8	2.0 to 10.0
Eucon WR-91	A, D	Lignosulfonate	5.4 (2014)	6.0	Less	1.7	2.0 to 10.0
Eucon X-15	A, F	Lignosulfonate	8.5 (2012)	12.6	More	0.7	4.0 to 15.0
Plastol 341	A, F	Polycarboxylate Resin	6.0 (2011)	15.4	More	0.2	2.0 to 10.0
Plastol 5000	F	Methacrylic Acid Copolymer	6 (2011)	13.6	More	0.2	3.0 to 15.0
Plastol 5500	F	Polycarboxylate	4.2 (2011)	17.5	More	0.2	2.0 to 10.0
Plastol 5700	F	Polyester Polyacrylic-Polyol	4 (2012)	14.7	More	(0.1)	2.0 to 10.0
Plastol 6200 EXT	F	Methacrylic Acid Copolymer	5.7 (2013)	15.0	More	.06	3.0 to 12.0
Plastol 6400	F	Methacrylic Acid Copolymer	4.4 (2014)	11.7	Same	0.2	3.0 to 12.0
Plastol AMP-X3***	S	Polycarboxylate Resin	4.5 (2012)	AE 4.2	Less	AE 0.0	2.0 to 12.0
Plastol Ultra 109	F	Polycarboxylate Resin	3.2 (2011)	AE 14.5	More	(0.2)	2.0 to 12.0
Visctrol	S	Napthalene Sulfonate	2.0 (2014)	5.5	More	0.1	1.0 to 12.0

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**General Resource Technology**  
**2978 Center Court**  
**Eagan, MN 55121**  
**651-454-4151 (office)**  
**920-595-0438 (cell)**

KB - 1200	A	Lignosulfonate	15.5 (2012)	5	Less	(0.3)	3.0 to 12.0
Polychem 400 NC	A	Lignosulfonate	15.5 (2008)	5	Less	0.3	3.0 to 5.0
Polychem Paver Plus	A	Lignosulfonate	20.7 (2009)	5.7	Less	(0.3)	2.0 to 8.0
Polychem R	D	Hydroxycarboxylic Acid Salts	15.7 (2009)	5.0	Less	1.5	2.0 to 5.0

**Moxie International**  
**3201 Swetzer Rd.**  
**Loomis CA 95650**

Moxie 1800	S	Silicate Based Solution	11 (2013)	AE 0.0	Less	AE 0.2	11.0 to 20.0
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**Sika Corporation**  
**201 Polito Avenue**  
**Lyndhurst, NJ 07071**

Plastiment	B, D	Hydroxylated Carboxylic Acid	4 (1990)	AE 7.3	Same	AE 3.1	2.0 to 4.0
Plastiment ES	B, D	Carbohydrates	2.85 (2010)	AE 5.7	More	AE 2.8	2.0 to 4.0
Plastocrete 10 N	A, B, D	Glycerol	2 (2013)	AE 7.4	Less	AE 1.0	1.5 to 5.0
Plastocrete 100	A	Lignosulfonate Based Material	4 (2012)	AE 6.0	More	AE 0.8	2.0 to 6.0
Plastocrete 161	A	Lignin Polymer	5.3 (2012)	AE 5.8	Less	AE 1.3	2.0 to 6.0
Sika CNI	C	Calcium Nitrate Based	19 (2000)	AE 2.9	Same	AE 1.1	15 to 120
Sika Control 40	S	Propane, Ethanol	28 (2012)	AE 4.5	More	AE 0.2	8.0 to 30.0

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Sika Rapid 1	C	RMF-1503	20 (1996)	AE 3.1	Less	AE (1.6)	4.0 to 48.0
Sika Set NC	C, E	Calcium Nitrate	24 (2005)	AE 13.0	Less	AE 1.7	10.0 to 45.0
Sika Stabilizer 300 SCC***	S	Sulfonated Napthalene & Melamine Polymer	0.2 (2014)	AE 0.0	Same	AE (0.3)	0.2 to 4.0
Sika Stabilizer 4R	S	Propylene Glycol	4 (2012)	AE 2.8	More	AE 0.2	1.0 to 7.0
Sika ViscoCrete 1000	A, F	Polycarboxylate	6.8 (2011)	AE 15.3	Less	AE 0.40	3.0 to 18.0
Sika ViscoCrete 2100	A, F	Polycarboxylate	4.7 (2005)	AE 22.3	Less	AE (0.3)	2.0 to 12.0
Sika Viscocrete 2110	A, F	Polycorboxylate Polymer	4.7 (2009)	AE 22.3	Less	AE (0.3)	3.0 to 12.0
Sika ViscoCrete 4100	A, F	Polycarboxylate	3.6 (2005)	AE 18.6	Less	AE (0.9)	3.0 to 12.0
Sika ViscoCrete 6100	A, F	Polycarboxylate Polymer	6 (2003)	AE 23.4	Less	AE (0.8)	3.0 to 8.0
Sikament 686	A, F	Triethanolamine	6.5 (2005)	AE 18.6	Less	AE (1.0)	3.0 to 18.0
Sikament SPMN	F	Sulfonated Napthalene Condensate	10 (2000)	AE 13.1	Less	AE (0.3)	10.0 to 40.0
Sikaplast 300GP	A	--	5 (2013)	AE 7.7	Less	AE 0.2	2.0 to 12.0
Sikaplast 500	A,F	Polymer Solution	3.5 (2008)	AE 6.6	Less	AE 0.7	3.0 to 12.0
Sikatard 440	B	-----	4 (2011)	AE 3.9	Less	AE 1.75	2.0 to 48.0

**W. R. Grace and Company**  
**7237 East Gage Ave.**  
**Los Angeles, CA 90040**

ADVA 140 (M)	A, F	Polycarboxylate	9.8 (2011)	12.8	More	Same	2.0 to 20.0
ADVA 190	A, F	Polycarboxylate	5.0 (2011)	13.8	More	0.3	3.0 to 15.0
ADVA 195	F	Polyoxyalkyleneamine	5.1 (2011)	12.4	More	0.3	3.0 to 15.0

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ADVA 198	F	Polycarboxylate	5.0 (2014)	AE 14.8	More	1.2	2.0 to 15.0
ADVA 390	F	Polycarboxylate	3.6 (2014)	AE 16.6	Less	AE (0.1)	2.0 to 10.0
ADVA 405	A, F	Polycarboxylate	7.3 (2014)	13.7	More	0.2	12.0 to 18.0
ADVA 408	F	Polycarboxylate	10.5 (2013)	13.9	More	0.2	10.0 to 18.0
ADVA Cast 530	A, F	Polycarboxylate	6.5 (2012)	14.7	Less	(0.4)	3.0 to 10.0
ADVA Cast 540	F	Carboxylated Polymer	6 (2002)	AE 13.5	Less	AE 0.6	5.0 to 20.0
ADVA Cast 555	A, F	Polycarboxylate	12.3 (2011)	13.7	More	0.4	8.0 to 20.0
ADVA Cast 575	A, F	Polycarboxylate	3.3 (2012)	14.6	More	0.1	2.0 to 10.0
ADVA Cast 585	F	Polycarboxylate	3.6 (2014)	AE 16.6	Less	AE (0.1)	2.0 to 10.0
ADVA Cast 600	A, F	Polycarboxylate	4.0 (2014)	16.6	More	(0.4)	2.0 to 10.0
ADVA Flex	A, F	Polycarboxylate	6.2 (2006)	AE 14.0	Less	AE 0.67	4.0 to 14.0
ADVA XT2	A	Polycarboxylate	4.8 (2013)	9.7	More	0.0	2.0 to 10.0
Daracem 100	G	Sodium/Potassium Naphthalene Sulfonate	14.0 (2010)	16.6	More	2.2	5.0 to 20.0
Daracem 19	F	Modified Naphthalene Sulfonate	14 (2010)	14.9	More	0.4	6.0 to 20.0
Daracem 55	A	Calcium Nitrate	4.1 (2014)	8.4	Less	1.1	2.0 to 15.0
Daracem 65	A	Aqueous Solution of Organic Compounds	4.8 (2011)	7.4	More	(0.1)	3.0 to 9.0
Daracem ML 330	F	Melamine-Formaldehyde Polymer	14.5 (1998)	AE 15.4	More	AE 1.2	6.0 to 25.0
Daraset 200	C	Calcium Nitrate/Nitrite Based Solution	30 (1998)	AE 8.3	More	AE (2.6)	10 to 100
Daraset 400	C	Calcium Nitrate	15 (2011)	3.5	Same	(1.3)	10.0 to 60.0

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Daratard 17	B, D	Hydroxylated Organic Compounds	6.2 (2011)	5.9	Less	3.1	2.0 to 8.0
DCI	C, E	Calcium Nitrite Aqueous Solution	45 (2014)	6.9	More	(0.6)	2.0 to 6.0 gal. per cu.yd.
Eclipse 4500	S	2-Methylpentane-2	31 (2010)	7.0	More	0.6	0.2 to 2.0 gal. per cu.yd.
Eclipse Floor 200	S	2-Methylpentane-2	37 (2011)	2.6	No AEA Used	0.7	0.2 to 2.0 gal. per cu.yd.
EXP 950	F	Carboxylated Polyether	2.2 (2007)	AE 14.9	Less	AE (1.0)	2.0 to 10.0
Mira 110	A, F	Calcium Nitrite	15.2 (2009)	13.3	More	(0.5)	3.0 to 15.0
Mira 35	A	Calcium Nitrate	9 (2010)	8.6	Less	1.0	3.0 to 12.0
Mira 62	A, F	Polyacrylate	4.3 (2012)	6.8	Less	0.1	2.0 to 15.0
Mira 85	A, F	Sodium Formate & Sodium Thiocyanate	7.6 (2009)	8.7	Less	0.1	3.0 to 12.0
Mira 95	F	---	12 (2015)	AE 14.6	More	1.2	2.0 to 15.0
Polarset	C	Calcium Nitrite	18 (2011)	5.3	Less	(2.1)	8.0 to 60.0
Recover	D	Polymer Based	2.5 (2013)	7.6	Less	2.0	2.0 to 128.0
V-MAR 3	S	Polymer	8 (2010)	AE 2.5	Same	AE 0.0	1.0 to 10.0
V-MAR F100	S	Polymer with Ethanol	6 (2010)	2.9	Less	(0.3)	3.0 to 12.0
V-MAR VSC500	B, D	Aqueous Solution of Polymer & Sodium Gluconate	7.25 (2010)	AE 6.4	Less	AE 1.8	7.0 to 15
WRDA 20	A	Glucose Polymers, Lignosulfonate, and Amine	2.5 (1985)	AE 6.8	Less	AE 1.0	2.5
WRDA 27	A, D	Modified Glucose Polymer	3 (2003)	AE 6.7	More	AE 0.5	2.0 to 6.0
WRDA 64	A	Lignosulfonate, Amine, and Glucose Polymer	3 (1979)	AE 11	Less	AE 1.4	3.0 to 5.0
WRDA 79	A, D	Modified Lignosulfonate	4.3 (2012)	5.5	Less	0.3	3.0 to 10.0

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WRDA 82	A, D	Modified Lignosulfonate	2.8 (2012)	6.6	Less	0.9	3.0 to 5.0
WRDA Pave 18	A, D	Modified Lignosulfonate	2.8 (2012)	6.6	Less	0.9	2.0 to 10.0
WRDA with Hycol	A	Aqueous Solution of Organic Compounds	4.0 (2009)	5.7	Less	0.9	3.0 to 6.0
Zyla 610	A	Carbohydrates & Amine	3.3 (2008)	AE 7.9	Same	AE 0.1	2.0 to 4.0
Zyla 625	A, D	Polycarboxylate	3.0 (2014)	6.2	Less	0.5	2.0 to 10.0
Zyla 630	A	Polycarboxylate	3 (2014)	AE 6.5	Less	AE 0.1	2.0 to 7.0

## Authorized ASTM C260 Air-Entraining Admixtures for Concrete

Product name	Class or composition	Date report was submitted	Dosage rate suggested by manufacturer, fl. oz. per 100 lbs of cement or cementitious material
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**BASF Admixtures, Inc.**  
**23700 Chagrin Boulevard**  
**Cleveland, OH 44122**  
**Tel. No: (216) 839-7500**

MasterAir AE 200	Fatty acid Salts	1991	1
MasterAir AE 400		2008	0.25 to 4.0
MasterAir AE 90	Rosin Soap	1993	0.25 to 4.0
MasterAir VR 10	Vinsol Resin	1991	0.4 to 4.0
MasterAir VR 20	Vinsol Resin	1992	0.4 to 4.0

**Cellular Concrete Technologies LLC**  
**184 Technology Dr., Suite 200**  
**Irvine, CA 92618**

Stable Air	Mixture of Glycols, Glycol ethers and other salts	2011	8.8 to 44.0
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**The Euclid Chemical Company**  
**19218 Redwood Road**  
**Cleveland, OH 44110-2799**

AEA-92		1992	0.50 to 4.0
AEA-92S	Sodium Sulfonate	2010	0.5 to 2.0
Air Mix	Vinsol Resin	2004	0.5 to 1.0
Eucon Air 40	Resin Surfactant	1997	0.1 to 4.0

**General Resource Technology**  
**2978 Center Court**  
**Eagan, MN 55121**  
**651-454-4151 (office)**  
**920-595-0438 (cell)**

Polychem SA	Alpha Olefin Sulfonate	2010	0.2 to 2.0
Polychem SA - 50	Alpha Olefin Sulfonate	2009	0.5 to 3.0

**Sika Corporation**  
**201 Polito Avenue**  
**Lyndhurst, NJ 07071**

Sika Air	Resin Solution	2003	0.5 to 3.0
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## Authorized ASTM C260 Air-Entraining Admixtures for Concrete

Product name	Class or composition	Date report was submitted	Dosage rate suggested by manufacturer, fl. oz. per 100 lbs of cement or cementitious material
Sika Air 260	Fatty Acids	2013	0.1 to 6.0
Sika Air 360	Sodium Salts & Sulfonic Acid	2012	0.1 to 6.0
Sika Multi Air 25	Sulfonate & Amides	2010	0.5 to 1.5

**W. R. Grace and Company**  
**7237 East Gage Ave.**  
**Los Angeles, CA 90040**

AIRALON 3000	Sulfonate & Rosin Acid	2010	0.5 to 30
Daravair 1000/ Daravair Pave 10	Neutralized Resin and Rosin	1994	0.75 to 3.0
Daravair AT 30	Blend of Rosin and Organic Acid Salts	2004	0.5 to 3.0
Daravair AT 60	Aqueous Solution of Neutralized Vinsol Resin, Amine and Fatty Acids	1994	0.5 to 3.0
Daravair M	Neutralized Vinsol Resin	1975	1
Darex AEA	Organic Acid Salts	1975	
Darex II AEA	Alkaline Solution of Fatty Acid Salts	1993	0.75 to 3.0
Terapave AEA	Aqueous Solution of Soap	2011	0.5 to 3.0